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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,058	04/23/2001	Michael H. Spritzer	11156.81	5717

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EXAMINER	
HRUSKOCI, PETER A	

ART UNIT	PAPER NUMBER
1724	9

DATE MAILED: 01/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/841,058	Applicant(s) SPRITZER ET AL.	
	Examiner Peter A. Hruskoci	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. It is submitted that the temperature range of claim 11 fails to further limit the range recited in claim 10 .

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 8, 10-14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. in view of Barton et al.. Ross et al. disclose (see col. 8 lines 10-56) a method for treating material substantially as claimed. The claims differ from Ross et al. by reciting that the volatilized portion is oxidized in a second chamber at a specific temperature and pressure, or hydrothermally treated to convert a fraction of the volatilized portion. Barton et al. disclose (see col. 3 line 65 through col. 5 line 22) that it is known in the art to utilize temperatures and pressures within the recited range in a second chamber to aid in oxidizing vapor or a volatile portion from a first reaction chamber. It would have been obvious to one skilled in the art to modify the method of

Ross et al. by utilizing the recited temperatures and pressures in the second chamber, or the recited hydrothermal treatment in view of the teachings of Barton et al., to aid in oxidizing contaminants in the volatile portion. The specific temperatures and pressures utilized would have been an obvious matter of process optimization to one skilled in the art, depending on the specific material treated and results desired, absent a sufficient showing of unexpected results.

4. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. in view of Barton et al. as above, and further in view of Bremer et al. 5,562,834. The claims differ from references as applied above by reciting steps for injecting steam into the first and second chambers. Bremer et al. disclose (see col. 2 line 25 through col. 3 line 34) that it is known in the art to inject steam and wastewater into a chamber, to aid in separating organic impurities from the wastewater. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing the recited steps for injecting steam in view of the teachings of Bremer et al., to aid in separating organic impurities from the material.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. in view of Barton et al. as above, and further in view of Modell et al. 5,252,224 The claims differ from the references as applied above by reciting steps for separating carbon dioxide from process effluent and liquefying the separated carbon

dioxide. Modell et al. disclose (see col. 5 line 17 through col. 7 line 51, and col. 19 lines 2-52) that it is known in the art to separate carbon dioxide from an oxidized process effluent and liquefy the separated carbon dioxide, to aid in recovery of the carbon dioxide. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing the recited steps for separating and liquefying the carbon dioxide in view of the teachings of Modell et al., to aid in recovery of the carbon dioxide.

6. Claims 7, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. in view of Barton et al. as above, and further in view of Hazlebeck et al. 6,054,057. The claims differ from the references as applied above by reciting a step for using a auger to mix and transport material in the first chamber, and that the first and second chambers are located in a single pressure vessel. Hazlebeck et al. disclose (see col. 5 line 57 through col. 9 line 25) that it is known in the art to utilize a auger to aid in dislodging solids from the wall of a reaction chamber, and transporting the solids to an exit port, and to utilize a single reaction vessel including an upper backmixing section or chamber and a lower plug flow section or chamber. It would have been obvious to one skilled in the art to modify the references as applied above by utilizing the recited auger and chambers in view of the teachings of Hazlebeck et al., to aid in transporting and hydrothermally treating the material.

7. Applicants argue that Barton et al. fail to teach or suggest a method as claimed in amended claim 1 because the temperature within the aqueous phase reaction zone of Barton et al. must be below the critical point of water. It is submitted that Ross et al. as applied above was used to teach that it is known in the art to utilize temperatures and pressures within the recited range to volatilize a portion of waste material in a first chamber, followed by oxidizing the volatilized portion in a second chamber.

8. Applicants arguments concerning Bremer et al., Modell et al. and Hazlebeck et al. appear to be based on the propriety of Barton et al.. It is submitted that the combination of Ross et al. and Barton et al. is deemed properly applied for reasons stated above.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (703) 308-3839. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Simmons, can be reached on (703) 308-1972. The fax phone number for this Group is (703) 872-9310 (non-after finals) and 703-872-9311 after finals.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Peter A. Hruskoci

Peter A. Hruskoci
Primary Examiner
Art Unit 1724

P. Hruskoci
January 16, 2003